

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Appln. Of: CARRABIS

Serial No.: 10/071,731

Filed: February 7, 2002

For: PROGRAMMABLE METHOD AND APPARATUS FOR REAL-TIME
ADAPTATION OF PRESENTATIONS TO INDIVIDUALS

Group: 2164 Confirmation No. 2985

Examiner: Srirama T. Channavajjala DOCKET: NEXT.1000

MAIL STOP APPEAL BRIEF - PATENTS
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STATUS OF CLAIMS

Claims 1-18 are pending in this application.

Claims 1-18 stand finally rejected and are on Appeal.

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GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- I. Whether the rejection of claims 1-18 are patentable over the cited references, with regards to 35 U.S.C. 103(a) is in error.

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ARGUMENTS

A. The rejection of claims 1 and 12 as unpatentable over Bresse et al. in view of Mizokawa is in error.

1. Emotions are not Modalities

Claim 1 is limited to "determining the preferred modalities of the individual." In the Final Office Action and in the Examiner's Answer, the Examiner admits Breese does not disclose preferred modalities, but states "Mizokawa teaches a system which including 'determining the preferred modalities of the individual' [col 6, line 55-60], preferred modalities of the individual corresponds to Mizokawa's user's emotions as detailed in col 6, line 58-60." Page 4 of the Final Office Action and Page 4 of the Examiner's Answer. The col 6, line 55-60 passage is as follows:

Further, based on the presumed emotions, the user's emotion recognition unit A2 determines the user's current emotion. In the above, the several patterns of emotions are obtained by categorizing in advance the emotion expressions of the user into several patterns of emotions such as joyful, sad, surprised, angry, disgusted, and fearful.

As detailed in the filed application, "humans have as many modalities as they have senses. For the purposes of a simplified discussion, we use a simplified web browser interface for reference. We can match the sensory modalities to the presentation via a grid. The grid [shown in the application] represents three of the many sensory modalities most humans share; visual, auditory and kenisthetic." Paragraph 54 of the application. This statement should not be read to limit the modalities to the five common senses. The "sensory" modalities are "input" modalities

and those having ordinary skill in the art recognize that sensory modalities include things like visual, auditory, kinesthetic, olfactory, gustatory, vestibular, proprioceptive, tactile and vomeronasal. There is some conjecture if the PNI is another sensory modality. Consciousness researchers are discovering we have more senses than we previously realized (vomeronasal, for example, wasn't recognized as a sense until the mid-1990s). It is sufficient to say that we have more sensory modalities than the five a school child can name and it is reasonable to believe in the future we may understand we have more senses than we recognize today.

As stated in the Appeal Brief, the Applicant does not understand how the Examiner determines that modalities encompass emotions. On pages 9-11 of the Examiner's Answer, the Examiner addresses this matter. Specifically, the Examiner does not disagree with the Applicant's definition of modalities as it used in the art and defined in the application. Rather, the Examiner states "as recognized from the Mizokawa's reference that characteristics of sounds, voices, ... temperature, brightness, ... are directly related to user's emotions ... therefore, emotions are directly related to modalities." Basically, the Examiner's argument appears to be that the Mizokawa computer senses input in a manner comparable to a person's sensory modalities, and Mizokawa determines emotions, therefore recognizing emotions is determining preferred modalities. This logic is clearly flawed. Defining whether an individual is sad or joyful is not comparable to determining if an individual has a preference toward the auditory or the visual. Emotions are not modalities.

The Examiner's comments on page 11 of the Examiner's Answer better isolates the requirements of the claims and displays the difference between the teachings of

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Mizokawa and the claimed invention. As the Examiner cites from paragraph 66 of the original filed application, "when the grid movement is determined, the modality summations can be selected to determine if the viewer's attention is focused on visual, auditory, kinesthetic, or other related cues." ***This statement from the application encapsulates "determining preferred modalities of an individual."*** Determining which modality the individual is focused on determines which modality the individual prefers. On page 11 of the Examiner's Answer, the Examiner states "In response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which the Applicant relies ... are not recited in the rejected claim."

None of the references cited disclose determining preferred modalities of an individual.

2. Preferred

Claim 1 and claim 12 reference "preferred modalities." The Examiner makes conclusory statements that emotions are modalities. To the extent these statements are given any weight, the Examiner has ignored the term "preferred" in that he has not suggested Mizokawa discloses how to determine a preferred emotion of an individual. "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). One would assume everyone would want to be joyful and this exercise would be fruitless, but it is worth noting that Mizokawa does not disclose how to determine

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what emotion is preferred by an individual and the Examiner does not suggest Mizokawa discloses how to determine which emotion is preferred by an individual.

3. Abstract Idea

The present file wrapper includes two non-final office actions, two final office actions and an advisory action. Not a single claim has been amended since the application was filed. Yet, the Examiner waited until after a second appeal brief was filed in this prosecution to raise the notion of an "abstract idea" rejection. This matter is not ripe for argument as it raised for the first time in an Examiner's Answer and it is improperly raised in an appeal directed solely to 103 rejections. That said, the following citation from paragraphs 66 and 67 of the application provides again the definition for "preferred modalities" and the reason determining/calculating preferred modalities provides a useful, tangible, and concrete result:

When grid movement is determined, the modality summations can be selected to determine if the viewer's attention is focused on visual, auditory, kinesthetic or other related cues. **Based on the results** of this equation, the web server can prepare in real time what the next presentation and interface should be in order **to capture more of the viewer's attention**, by presenting the web content in modalities which the viewer has nonconsciously selected.

(emphasis added)

4. Calculating Preferred Modalities

On page 13 and 14 of the Examiner's Answer, the Examiner makes a separate argument of "calculating preferred modalities," apparently feeling it needed to be argued separately from "determining preferred modalities." The Applicant is not

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raising a separate argument here and believes the limitation "calculating preferred modalities" is novel over the cited art for the same reasons "determining preferred modalities" is novel over the prior art.

B. Dependent Claims

As can readily be seen, the Applicant's claim is limited to determining/calculating preferred modalities, rendering the claims allowable in view of Breese and Mizokawa for at least this reason. Therefore, the Applicant respectfully submits claims 1 and 12 are allowable in that they recite features and steps that are neither disclosed, taught, nor suggested by Breese in view of Mizokawa. Furthermore, the Applicant submits that claims 2-11 and 13-18 are allowable for at least the reason that they depend either directly or indirectly from allowable independent claims. In re Fine, 5 U.S.P.Q. 2d 1596, 1608 (Fed. Cir. 1988).

1. Modifying the Environment

Claims 2, 3, 7, 8, 13, 16, and 17 are directed toward modifying the environment (or environmental unit or modifiable environmental unit) in response, in varying ways, to the sensed information and/or the determined/calculated preferred modalities. In each of these cases, the Examiner responds (as shown on pages 15 and 17 of Examiner's Answer) that the computer, be it Mizokawa or Breese, records changing emotions.

Paragraph 13 of the originally filed application states:

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The premise of the present invention is to have sensing devices, many of which already exist in an individual's environment or which could be inconspicuously arranged so as not to alter the environment, sensing an individual's actions. A processing unit then interprets those actions, analyzing the psycho- and cognitive-motor behavior and other activity to identify preferred modalities of the individual. Modifiable environmental units are then modified to make the environment more consistent with the individual's preferred modalities.

Tracking data is not the same, or remotely similar, to changing the environment of an individual. It is unclear how the Examiner is equating changes in sensed emotions to changing an individual's environment. This question has been asked in no fewer than five office action responses, two appeal briefs, and an Examiner Interview without additional clarity being provided.

2. Linear Algebraic Transforms

There is a difference between *linear* algebraic transforms and algebraic transforms. On page 18 of the Examiner's Amendment, the Examiner states Breese discloses algebraic transforms. The Examiner does not state Breese discloses *linear* algebraic transforms, which is a limitation of claim 5. Breese does not disclose *linear* algebraic transforms. Thus, the cited references fail to disclose all the limitations of claim 5. This comment has been included in the office action response filed in October of 2005 and in the Appeal Brief, but the Examiner has never addressed the difference between linear algebraic transforms and algebraic transforms.

3. Order Preferred Combination of Modalities

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Claims 6, 8, and 9 are limited to ordering a preferred combination of modalities. In the rejection of claim 1, the Examiner rejects preferred modalities based on Mizokawa's teaching of emotion recognition. Therefore, a rejection of this limitation logically following the rejection of claim 1 should involve an argument that a reference teaches a preferred combination of emotions. The Examiner cites to the following passage to argue Mizokawa discloses ordering a preferred combination of modalities (col. 7, lines 11-24 of Mizokawa):

The user's command recognition unit A3 recognizes and establishes the user's command information based on indirect command information obtained by analyzing the meaning of the sound/voice recognized by the auditory input device and by analyzing information on the user's gestures recognized by the visual input device, and based on direct command information inputted via the keyboard. The command information includes not only direct commands such as "search" or "lay out an action plan" but also a degree of requirement for the command such as "urgent" and "normal". The degree of requirement can be recognized by, for example, the loudness of the user's voice or the speed of the user's speech inputted via the auditory input device, or the user's gesture inputted via the visual input device.

The Mizokawa passage discloses an ordering of tasks based on the emotions interpreted from the user. The reference, as previously discussed, does not teach modalities. Further, the reference does not teach combinations of or ordering of modalities, or the Examiner's interpretation of modalities.

4. Claim 9

Claims 9 is limited to "wherein the combination and order of modalities is calculated by an equation: $\sum_{i=-\infty}^{\infty} ((\sum G_i(\delta x_i/\delta t))/(\sum G_i(dx_i/dt_i)))dG_i dt_i \propto \Psi(G).$ " The Examiner rejects this claim as obvious over Breese in view of Mizokawa despite

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stating on page 19 of the Examiner's Answer, "It is noted that both **Breese, Mizokawa** **do not show modalities calculation by an equation.**" (*Emphasis added*). Claim 9 is not limited to using "an equation." Claim 9 is limited to a very specific equation, which is not disclosed in any reference cited by the Examiner. As the Examiner admits, the references fail to disclose every limitation of the claimed invention, and thus should be allowed. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must teach, disclose, or suggest, either implicitly or explicitly, all elements/features/steps of the claim at issue. See, e.g., In re Dow Chemical, 5 U.S.P.Q. 2d 1529, 1531 (Fed. Cir. 1988), and In re Keller, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981).

CONCLUSION

In view of the foregoing, it is respectfully requested that the Examiner's rejection of the subject application be reversed in all respects.

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